

**National Transportation Safety Board
Washington, DC 20594**

Brief of Accident

Adopted 03/31/1998

ANC97FA008		11/26/1996		BETHEL, AK		Aircraft Reg No. N4704B		Time (Local): 11:01 AST	
File No. 1883									
Make/Model: Cessna / 208B						Fatal		Serious	
Engine Make/Model: P&W / PT6A-114						Crew		Minor/None	
Aircraft Damage: Destroyed						1		0	
Number of Engines: 1						Pass		0	
Operating Certificate(s): Commuter Air Carrier									
Name of Carrier: ARCTIC TRANSPORTATION SERVICES									
Type of Flight Operation: Non-scheduled; Domestic; Cargo									
Reg. Flight Conducted Under: Part 135: Air Taxi & Commuter									
Last Depart. Point: Same as Accident/Incident Location						Condition of Light: Day			
Destination: KWIGILLINGOK , AK						Weather Info Src: Weather Observation Facility			
Airport Proximity: Off Airport/Airstrip						Basic Weather: Visual Conditions			
						Lowest Ceiling: None			
						Visibility: 40.00 SM			
						Wind Dir/Speed: 010 / 012 Kts			
						Temperature (°C): -14			
						Obstr to Vision: None			
						Precipitation: None			
Pilot-in-Command		Age: 36				Flight Time (Hours)			
Certificate(s)/Rating(s)						Total All Aircraft: 3623			
Airline Transport; Commercial; Multi-engine Land; Single-engine Land; Single-engine Sea						Last 90 Days: 270			
Instrument Ratings						Total Make/Model: 474			
Airplane						Total Instrument Time: 105			

The pilot was departing on a cargo flight. Just after takeoff, a company dispatcher attempted to contact the pilot by radio. The pilot replied, 'stand by.' No further communication was received from the pilot. The airplane was observed by ATC personnel in a left turn back toward the airport at an estimated altitude of 200 feet above the ground. The angle of bank during the turn increased, and the nose of the airplane suddenly dropped toward the ground. The airplane struck the ground in a nose and left wing low attitude about 1 mile west of the airport. The terrain around the airport was relatively flat, snow covered tundra. The airplane was destroyed. A postaccident examination of the engine did not reveal any mechanical malfunction. Power signatures in the engine indicated it was developing power. A postaccident examination of the propeller assembly revealed one of three composite blades had rotated in its blade clamp 17/32 inch; however, the propeller manufacturer indicated blade contact with the ground would try to drive the propeller from a high blade angle toward a low blade angle. Movement toward a low blade angle would compress the propeller feathering springs, while movement toward a high blade angle would result in a hydraulic lock condition as oil in the system is compressed. The propeller manufacturer indicated they had no reports of composite blade slippage in the blade clamps.

Brief of Accident (Continued)

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Occurrence #1: UNDETERMINED
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (F) MISCELLANEOUS,AIRFRAME - UNDETERMINED

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

Findings
2. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
3. TERRAIN CONDITION - SNOW COVERED

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this accident as follows.
failure of the pilot to maintain control of the airplane, while maneuvering to reverse direction after takeoff, after encountering an undetermined anomaly. The undetermined anomaly was a related factor.